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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,022	05/05/2004	David B. Naughton	12353-004	9650
757 7590 07/11/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER GODFREY, KEITH JOSEPH	
			ART UNIT 1732	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/840,022	Applicant(s) NAUGHTON, DAVID B.	
	Examiner Keith J. Godfrey	Art Unit 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/05/2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Amendment filed 04/20/2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415).

As to claim 1, Ladney, Jr. (US 3871060) teaches the basic claimed process of manufacturing a molded article including: applying a base paint substance to the molding surface (column 4, lines 53-64), injecting a plastic polyolefin foam (thermoplastic resin) (column 4, lines 37-41) against the base paint and holding the foam against the base paint layer for a predetermined time to form the molded article having a surface. It is submitted that because the plastic injected foam is at a high temperature due to its melt state that any heat from said foam will transfer to areas of lower heat, like the base paint coating. It is further submitted that in order for adhesion to occur a degree of diffusion has occurred at the interface between the foam layer and the base paint layer. As to claims 1 and 9, although Ladney, Jr. (US 3871060) teaches the use of a polyurethane base paint as the in-mold coating substance, Ladney, Jr. (US

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3871060) does not specifically teach the use of a chlorinated polyolefin. Nakajima et al. (US 4608415) teaches the use of a chlorinated polyolefin resin used in the form of an aerosol paint for coating purposes (column 3, lines 63-65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use chlorinated polyolefins as a base paint coating material as taught by Nakajima et al. (US 4608415) in the process of Ladney, Jr. (US 3871060) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20) of Nakajima et al. (US 4608415). It is submitted that a chlorinated polyolefin improves the surface energy thereby improving adhesion.

As to claims 2 and 5, Nakajima (US Patent 4,608,415) teaches the use of the chlorinated polyolefin resin coating in the form of an aerosol paint (column 3, lines 63-66). It is submitted that, in an aerosol delivered product, a plurality of particles are sprayed directly from a pressurized solution of such product. Nakajima (US Patent 4,608,415) further teaches the chlorinated resins must be dissolved in solvents to make the aerosol solution (column 3, lines 63-66). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a chlorinated polyolefin article spray coating as taught by Nakajima (US Patent 4,608,415) in the process of Ladney, Jr. (US 3871060) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20).

Claims 3-4, 6-13, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladney (US Patent 3,871,060) and Nakajima (US Patent 4,608,415) in further view of Rechenberg et al. (US 2004/0249075).

As to claim 3, Ladney, Jr. (US 3871060) teaches the method of in-mold coating and Nakajima (US Patent 4,608,415) teaches the use of chlorinated polyolefin coatings.

Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) do not teach electrostatic spraying of said coatings. Rechenberg et al. (US 2004/0249075) teaches the coating of a substrate using thermosetting polymer compositions (abstract). Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415), because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

As to claim 4, Nakajima (US Patent 4,608,415) teaches the use of the chlorinated polyolefin resin coating in the form of an aerosol paint (column 3, lines 63-66). It is submitted that, in an aerosol delivered product, a plurality of particles are sprayed directly from a pressurized solution of such product. Nakajima (US Patent 4,608,415) further teaches the chlorinated resins must be dissolved in solvents to make

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the aerosol solution (column 3, lines 63-66). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a chlorinated polyolefin article spray coating as taught by Nakajima (US Patent 4,608,415) in the process of Ladney, Jr. (US 3871060) in view of Rechenberg et al. (US 2004/0249075) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20).

As to claims 6-7, Ladney, Jr. (US 3871060) teaches the method of in-mold coating and Nakajima (US Patent 4,608,415) teaches the use of chlorinated polyolefin coatings.

Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) do not teach the step of applying an electrically conductive substance. Rechenberg et al. (US 2004/0249075) teaches electrically spraying a coating composition including carbon black (paragraph 0083). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon black (electrically conductive substance) as taught by Rechenberg et al. (US 2004/0249075) in the coating process taught by Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) because of known advantages that carbon black provides such as aesthetic purposes (paragraph 0083) and electrostatic protection.

As to claims 8-9, the teachings of Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415) are discussed above in the 103(a) rejection of claims 1-2 and 5 above but do not teach electrostatic spraying of coatings.

Rechenberg et al. (US 2004/0249075) teaches the coating of a substrate using thermosetting polymer compositions (abstract). Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415), because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

As to claims 10-11, Nakajima (US Patent 4,608,415) teaches the use of the chlorinated polyolefin resin coating in the form of an aerosol paint (column 3, lines 63-66). It is submitted that, in an aerosol delivered product, a plurality of particles are sprayed directly from a pressurized solution of such product. Nakajima (US Patent 4,608,415) further teaches the chlorinated resins must be dissolved in solvents to make the aerosol solution (column 3, lines 63-66). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a chlorinated polyolefin article spray coating as taught by Nakajima (US Patent 4,608,415) in the process of Ladney, Jr. (US 3871060) because of the known advantages that chlorinated polyolefins provide such as improved adhesion and stability (column 5, lines 9-20).

As to claims 12-13, Ladney, Jr. (US 3871060) teaches the method of in-mold coating and Nakajima (US Patent 4,608,415) teaches the use of chlorinated polyolefin coatings.

Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) do not teach the step of applying an electrically conductive substance. Rechenberg et al. (US 2004/0249075) teaches electrically spraying a coating composition including carbon black (paragraph 0083). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon black (electrically conductive substance) as taught by Rechenberg et al. (US 2004/0249075) in the coating process taught by Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) because of known advantages that carbon black provides such as aesthetic purposes (paragraph 0083) and electrostatic protection.

As to claim 15, it is submitted that because the process of Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) teaches the claimed process, then the resulting product would have a surface energy of at least 38 dynes per centimeter after the step of removing the molded article from the mold. Further, because Nakajima (US Patent 4,608,415) teaches improved adhesion of chlorinated polyolefin coatings, it is submitted that Ladney, Jr. (US 3871060) in view of Nakajima (US Patent 4,608,415) suggest the improved surface energy of at least 38 dynes/cm.

As to claim 16, the teachings of Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415) are discussed above in the 103(a) rejection above but do not teach electrostatic spraying of coatings.

Rechenberg et al. (US 2004/0249075) teaches the coating of a substrate using thermosetting polymer compositions (abstract). Rechenberg et al. (US 2004/0249075) further teaches that the coating composition can be applied by an electrostatic spray involving the steps of charging the particles to be sprayed by passing them through a corona field and depositing said particles onto the grounded article (paragraph 0092). Therefore it would have been obvious to one skilled in the art at the time the invention was made to include the method of electrostatic spray taught by Rechenberg et al. (US 2004/0249075) for applying a chlorinated polyolefin coating in the process of Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415), because of known advantages that electrostatic spraying provides such as reduced pinholes, hence providing for an improved product.

As to claim 17, Ladney, Jr. (US 3871060) teaches injection molding, hence teaching on injection molding apparatus (column 2, lines 40-45).

As to claims 18-19, Ladney, Jr. (US 3871060) teaches the method of in-mold coating and Nakajima et al. (US 4608415) teaches the use of chlorinated polyolefin coatings.

Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415) do not teach the step of applying an electrically conductive substance. Rechenberg et al. (US 2004/0249075) teaches electrically spraying a coating composition including carbon black (paragraph 0083). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon black (electrically conductive substance) as taught by Rechenberg et al. (US 2004/0249075) in the coating process

taught by Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415) because of known advantages that carbon black provides such as aesthetic purposes (paragraph 0083) and electrostatic protection.

Response to Arguments

As to claims 8, 16-17 rejected under 102(b) applicant's arguments are moot in view of applicant's amendment.

Applicant contends Applicant contends that Ladney, Jr. (US 3871060) and Nakajima et al. (US 4608415) are not properly combinable and are nonanalogous references. Applicant's arguments have been fully considered but they are not persuasive. Ladney, Jr. (US 3871060) teaches a polyolefin product that is coated which adds a desired property to the product (col. 4, lines 38-41 and col. 5, lines 5-10). Nakajima et al. (US 4608415) teaches a chlorinated coating used on polyolefin products to add a desired property to the product (abstract). Since both references are concerned with coatings applied to polyolefin products, they are clearly analogous and properly combinable. The examiner maintains that their combined teachings suggest the instant invention.

Applicant further contends that Ladney, Jr. (US 3871060) and Nakajima et al. (US 4608415) are not reasonably pertinent to the same problem. Applicant's arguments have been fully considered but they are not persuasive. The primary reference of Ladney, Jr. (US 3871060) is not cited to disclose advantages of chlorinated coating, however he does show a coating on the exterior of his molded polyolefin article. It is the

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secondary reference, Nakajima et al. (US 4608415), which teaches the advantages that chlorinated coatings will have on a polyolefin article.

Regarding claims 9-11 and 15 applicant contends that they are not anticipated as discussed, relative to claim 8. This is not persuasive because claim 8 was amended therefore making the previous rejection is moot.

Regarding claims 3-4 and 6-7 the teachings of Rechenberg et al. (US 2004/0249075) merely disclose the grounding of the substrate (the examiner is interpreting that since the polymer is applied to the substrate and then cured to form a film, the substrate acts as a mold) and applying charged particles onto the surface of the substrate (see previous interpretation note regarding the substrate/mold) (paragraph [0092]). The examiner maintains that this teaching in combination with Ladney, Jr. (US 3871060) and Nakajima et al. (US 4608415) teach the claimed invention in claims 3-4 and 6-7.

Regarding the obviousness of modifying Rechenberg et al. (US 2004/0249075), it is noted that the examiner did not propose to modify Rechenberg et al. (US 2004/0249075). Rechenberg et al. (US 2004/0249075) modifies Ladney, Jr. (US 3871060) in view of Nakajima et al. (US 4608415). Rechenberg et al. (US 2004/0249075) does teach a method of electrostatic spray for applying electrical charge to particles (corona discharge), grounding the substrate (mold), and applying the charged particles to the substrate (mold) (paragraph [0092]). As noted above, it is the position of the Examiner that one of ordinary skill in the art would recognize that a mold may be categorized as a substrate, thus being obvious to modify Ladney, Jr. (US

3871060) and Nakajima et al. (US 4608415) in further view of Rechenberg et al. (US 2004/0249075) to meet the claim limitations.

Regarding claims 12-13 and 18-19 applicant contends similar argument made above regarding claims 3-4 and 6-7. Applicant's arguments are not persuasive as discussed above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith J. Godfrey whose telephone number is 571-272-6391. The examiner can normally be reached on 8:00-5:00 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kjg


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7/7/07